

Trip Reduction, Rideshare

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Reasons to support

- Cost savings
- Fuel cost to drive to and from work
- Insurance cost to drive to work above and beyond regular driving
- Depreciation cost of increased mileage on vehicle
- Accident avoidance fractional cost savings of an accident every two or three years

Reasons continued

- Tires fractional cost of tire wear
- New car 50 cents per mile or \$5 per 10 miles traveled
- Used car 30 cents per mile or \$3 per 10 miles traveled

Reasons continued

- Assuming use of the bus once per week and 15 miles round trip
- \$375 saved for a new car and \$225 for a used car
- Assuming use of the bus every day
- \$1875 saved for new car and \$1125 saved for used car

Pollution reduction USA average

- Passenger car
- VOC 2.80 grams/miles 12,500 miles per year 77.1 lbs per year
- CO 20.9 grams/mile 12,500 miles per year 575 lbs per year
- NOx 1.39 grams/mile 12,500 miles per year 38.2 lbs per year

Pollution reduction cont.

- Light Truck
- VOC 3.51 grams/mile 12,500 miles per year 108 lbs per year
- CO 27.7 grams/mile 12,500 miles per year 854 lbs per year
- NOx 1.81 grams/mile 12,500 miles per year 55.8 lbs per year

Calculations

- If one million cars in Utah used Trip Reduction one day per week
- VOC reduction per week 3.08 tons
- CO reduction per week 23.1 tons
- NOx reduction per week 1.53 tons

Issues

- Mobile source pollution is more than half of air pollution in Utah
- Utah population in the Wasatch Front is expected to double in the next thirty years
- Asthma and respiratory distress are at high levels when air quality is poor
- Many of the components in mobile source pollution are harmful or cancer causing

Buses

- 40 passenger 1998 bus with DDC Series 50 engine
- NOx 30 grams/mile
- CO 3 grams/mile
- VOC 0.7 grams/mile
- PM 0.15 grams/mile
- Emissions are equivalent to about 10 vehicles